

**WHAT IS CLAIMED IS:**

1. A method for processing transactions comprising the steps of:  
transmitting a signal to one of a plurality of point-of-sale devices, said signal comprising customer identification data;

5 transmitting an authorization request from one of said plurality of point-of-sale devices to a transaction processing system, said authorization request comprising a merchant identifier, transaction data, and said customer identification data;

determining, from said customer identification data, a payment processor that corresponds to said merchant identifier;

transmitting said authorization request to said payment processor; and

transmitting to one of said plurality of point-of-sale devices, said payment processor's response to said authorization request.

2. The method for processing transactions of claim 1, wherein said customer identification data further comprises a personal identification number manually entered at said one of a plurality of point-of-sale devices by a customer.

3. A method for processing transactions comprising the steps of:  
receiving a signal at a point-of-sale device, said signal comprising customer identification data;

transmitting an authorization request from said point-of-sale device to a transaction processing system, said authorization request comprising a merchant identifier, transaction data, and said customer identification data; and

receiving a response to said authorization request from said transaction processing system.

4. The method for processing transactions of claim 3, wherein said customer identification data further comprises a personal identification number manually entered at said point-of-sale device by a customer.

5. A method for collecting consumer purchasing trend information in a transaction system, said method comprising the computer-implemented steps of:  
transmitting a signal to one of a plurality of point-of-sale devices, said signal comprising customer identification data;

transmitting an authorization request from one of said plurality of point-of-sale devices to said transaction processing system, said authorization request comprising a merchant identifier, transaction data, and said customer identification data; and

updating a database with said transaction data and said customer identification data.

6. The method for processing transactions of claim 5, wherein said customer identification data further comprises a personal identification number manually entered at said one of a plurality of point-of-sale devices by a customer.

7. The method of claim 5, wherein the step of transmitting an authorization request further includes the following steps of:

determining, from said customer identification data, a payment processor that corresponds to said merchant identifier; and

transmitting said authorization request from said transaction processing system to said payment processor for authorization.

8. The method of claim 7, wherein said step of updating a database further comprises the step of updating a database with said transaction data and said customer identification data when said payment processor authorizes said transaction.

9. A method of monitoring customer progress in a merchant award program, comprising the steps of:

transmitting a signal to one of a plurality of point-of-sale devices, said signal comprising customer identification data;

transmitting an authorization request from one of said plurality of point-of-sale devices to a transaction processing system, said authorization request comprising a merchant identifier, said transaction data, and said customer identification data; and

crediting a customer account in a database with loyalty points indicative of said transaction data.

10. The method for processing transactions of claim 9, wherein said customer identification data further comprises a personal identification number manually entered at said one of a plurality of point-of-sale devices by a customer.

11. The method of claim 9, wherein the step of transmitting an authorization request further includes the following steps of:

determining, from said customer identification data, a payment processor that corresponds to said merchant identifier; and

transmitting said authorization request from said transaction processing system to said payment processor for authorization.

12. The method of claim 11, wherein said step of updating a database further comprises the step of updating a database with said transaction data and said customer identification data when said payment processor authorizes said transaction.

13. A method for processing transactions comprising the steps of:  
means for transmitting a signal to one of a plurality of point-of-sale devices, said signal comprising customer identification data;

means for transmitting an authorization request from one of said plurality of point-of-sale devices to a transaction processing system, said authorization request comprising a merchant identifier, transaction data, and said customer identification data;

means for determining, from said customer identification data, a payment processor that corresponds to said merchant identifier;

means for transmitting said authorization request to said payment processor;  
and

means for transmitting to said one of a plurality of point-of-sale devices a response from said payment processor.

14. A method of identifying a customer for the purpose of delivering personal services to the customer, comprising the steps of:

transmitting a signal over a wireless transmission medium to a merchant transceiver co-located with an attendant, said signal comprising customer identification data;

determining, from said customer identification data, a personal service that corresponds to said customer identification data; and

providing said personal service to said customer by the attendant.

15. The method for processing transactions of claim 14, wherein said customer identification data further comprises a personal identification number manually entered at said point-of-sale device by a customer.

16. A computer-readable medium containing instructions for processing transactions comprising the steps of:

transmitting a signal to one of a plurality of point-of-sale devices, said signal comprising customer identification data;

transmitting an authorization request from one of said plurality of point-of-sale devices to a transaction processing system, said authorization request comprising a merchant identifier, transaction data, and said customer identification data;

determining, from said customer identification data, a payment processor that corresponds to said merchant identifier;

transmitting said authorization request to said payment processor; and

transmitting to one of said plurality of point-of-sale devices, said payment processor's response to said authorization request.

17. The computer-readable medium of claim 16, wherein the step of transmitting a signal to one of a plurality of point-of-sale devices, further comprises the step of capturing a personal identification number entered by a customer.

18. A computer-readable medium containing instructions for processing transactions comprising the steps of:

receiving a signal at a point-of-sale device, said signal comprising customer identification data;

transmitting an authorization request from said point-of-sale device to a transaction processing system, said authorization request comprising a merchant identifier, transaction data, and said customer identification data; and

receiving a response from said payment processor.

19. The computer-readable medium of claim 18, wherein the step of receiving a signal at a point-of-sale device further comprises the step of capturing a personal identification number entered by a customer.

20. A computer-readable medium containing instructions for collecting consumer purchasing trend information in a transaction system, said method comprising the computer-implemented steps of:

transmitting a signal to one of a plurality of point-of-sale devices, said signal comprising customer identification data;

transmitting an authorization request from one of said plurality of point-of-sale devices to said transaction processing system, said authorization request

comprising a merchant identifier, transaction data, and said customer identification data; and

updating a database with said transaction data and said customer identification data.

5           21.     The computer-readable medium of claim 20, wherein the step of transmitting a signal to one of a plurality of point-of-sale devices, further comprises the step of capturing a personal identification number entered by a customer.

22.     The computer-readable medium of claim 20, wherein the step of transmitting an authorization request further includes the following steps of:

determining, from said customer identification data, a payment processor that corresponds to said merchant identifier; and

transmitting said authorization request from said transaction processing system to said payment processor for authorization.

10           23.     The computer-readable medium of claim 22, wherein said step of updating a database further comprises the step of updating a database with said transaction data and said customer identification data when said payment processor authorizes said transaction.

15           24.     A computer-readable medium containing instructions for monitoring customer progress in a merchant award program, comprising the steps of:

20           transmitting a signal to one of a plurality of point-of-sale devices, said signal comprising customer identification data;

transmitting an authorization request from one of said plurality of point-of-sale devices to a transaction processing system, said authorization request comprising a merchant identifier, said transaction data, and said customer identification data; and crediting a customer account in a database with loyalty points indicative of said transaction data.

25. The computer-readable medium of claim 24, wherein the step of transmitting a signal to one of a plurality of point-of-sale devices, further comprises the step of capturing a personal identification number entered by a customer.

26. The computer-readable medium of claim 24, wherein the step of transmitting an authorization request further includes the following steps of:

determining, from said customer identification data, a payment processor that corresponds to said merchant identifier; and

transmitting said authorization request from said transaction processing system to said payment processor for authorization.

27. The computer-readable medium of claim 26, wherein said step of updating a database further comprises the step of updating a database with said transaction data and said customer identification data when said payment processor authorizes said transaction.

28. A system for processing transactions, comprising:

a customer transceiver;

a merchant transceiver comprised of a transceiver antenna for providing operating power to said customer transceiver and for exchanging



information with said customer transceiver when said customer transceiver is placed in close proximity to said merchant transceiver;

a point-of-sale device processor, coupled to said merchant transceiver, for capturing transaction data, combining the transaction data with a received customer/transmitter ID number and a merchant identifier to form an authorization request, and transmitting the authorization request to a transaction processing system; and

a transaction processing system comprising:

a memory having program instructions; and

a processor configured to use said program instructions to:

receive said authorization request; determine, from said customer identification data, a payment processor that corresponds to said merchant identifier; transmit said authorization request to said payment processor for authorization; and transmit to one of said plurality of point-of-sale devices, said payment processor's response to said authorization request.

29. The system of claim 28, wherein said customer transceiver is further comprised of a memory operable to store information.

30. The system of claim 29, wherein said memory is operable to store a transmitter ID or a customer ID.

31. The system of claim 29, wherein said customer transceiver is further comprised of a processor coupled to said memory, said processor is adapted to read data from, and write data to said memory.

32. The system of claim 31, wherein said customer transceiver is further comprised of a security pad operable to capture biometric data and to convert said data into an electronic representation of said data.

33. The system of claim 32, wherein said biometric data is a fingerprint.

34. The system of claim 32, wherein said biometric data is a palm print.

35. The system of claim 32, wherein said processor is adapted to:  
compare an electronic representation of biometric data with a digital image stored in said memory; and

transmit said transmitter ID or said customer ID when said captured biometric data is identical to said digital image stored in said memory.

36. The system of claim 31, wherein said processor is adapted to:  
compare a transaction amount with a dollar amount stored in said memory; and

inhibit transmission of said transmitter ID and said customer ID when said transaction amount is greater than said dollar amount.

37. The system of claim 31, wherein said processor is adapted to subtract a transaction amount from a dollar amount stored in said memory when said transaction is authorized.

38. The system of claim 29, wherein said customer transceiver is further comprised of:

a processor coupled to the memory; and

a keyboard coupled to the processor;

wherein said processor is operable to transmit information stored in said memory, or manually entered via said keyboard.

39. The system of claim 28 wherein said customer transceiver is embedded inside an article of clothing.

40. The system of claim 28 wherein said customer transceiver is embedded inside an item of jewelry.

41. The system of claim 28 wherein said customer transceiver is embedded inside an electronic device.

42. The system of claim 28 wherein said merchant transceiver is further comprised of:

a processor coupled to the transceiver; and

a keyboard coupled to the processor;

wherein said processor is operable to receive information manually entered into said keyboard or received via said transceiver.

43. The system of claim 42, wherein said merchant transceiver is further comprised of a display device for displaying information to a user.

44. The system of claim 42, wherein said merchant transceiver is further comprised of a printer for printing a receipt.

45. The system of claim 42, wherein said merchant transceiver is further comprised of a memory operable to store information relating to a transaction.

46. The system of claim 42, wherein said merchant transceiver is further comprised of a communication interface for communicating with external computing devices.

47. The system of claim 46, wherein said communication interface provides wireless connectivity to a point-of-sale device.

48. The system of claim 46, wherein said communication interface provides connectivity to a CATV network.

49. The system of claim 46, wherein said communication interface provides connectivity to the public switched telephone network (PSTN).

50. The system of claim 46, wherein said communication interface provides connectivity to a self-service vending machine or pay telephone.